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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,889	04/15/2004	Michael P. Remington JR.	1-16100	8589

1678 7590 10/25/2006

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EXAMINER

NHU, DAVID

ART UNIT PAPER NUMBER

2818

DATE MAILED: 10/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/825,889

Applicant(s)

REMINGTON ET AL.

Examiner

David Nhu

Art Unit

2818

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 60/484,088.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 11/19/04.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTIONS**

1. The Office Action dated 8/4/06 for Election/Restrictions is withdrawn.

Claims 1-24 are remained for examination.

### **Claims Objection**

2. Claims 1, 18, 23, "the mixture" should be --the vaporized reactant mixture--  
"the coated glass substrate" should be --the coated hot glass substrate--

Claims 10, 11, 12, 13, 14, "the coating process" lack a clear antecedent basis.

Claims 15, 16, 20, 21, 22, 24, "the titanium oxide coating" should be --the nitrogen doped titanium oxide coating--

Claim 23, "said hot substrate" should be --said hot glass substrate--

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Morikawa et al (6,680,277 B2).

Regarding claim 1, Morikawa, (see figures 1-6, col. 2-6, lines 1-67), teaches a chemical vapor deposition (CVD) process for depositing a nitrogen doped titanium oxide coating on a hot glass substrate, comprising: providing a hot glass substrate 10 having a major surface over which a nitrogen doped titanium oxide coating is to be deposited (see figure 2); providing a uniform,

vaporized reactant mixture containing a titanium compound, an oxygen containing compound, and a nitrogen compound (see figure 3); delivering the vaporized reactant mixture to the major surface of the hot glass substrate and reacting the vaporized reactant mixture to deposit a coating of nitrogen doped titanium oxide over the major surface of the hot glass substrate (see figures 4, 5, 6); and cooling the coated hot glass substrate to ambient temperature.

### **Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Sugiyama'343 is cited as of interest.
  6. A shortened statutory period for response to this action is set to expired 3 (three) months and 0 (zero) day from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned(see 710.02 (b)).
  7. Any inquiry concerning this communication on earlier communications from the examiner should be directed to David Nhu (571)272-1792. The examiner can normally be reached on Monday-Friday from 7:00 AM to 5:30 PM. *The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.*
- Information regarding the status of an application may be obtained from the patent application information retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private*

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*PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).*

David Nhu 

October 14, 2006

